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	Application No.	Applicant(s)
Notice of Allowshilts	09/595,550	FLETT ET AL.
Notice of Allowability	Examiner	Art Unit
	William D. Thomson	2123
The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this ap or other appropriate communicatior GHTS. This application is subject to	plication. If not included not will be mailed in due course. THIS
1. This communication is responsive to <u>11/24/2004</u> .		
2. \boxtimes The allowed claim(s) is/are <u>1,2 and 4-9</u> .		
3. \boxtimes The drawings filed on <u>24 November 2004</u> are accepted by	the Examiner.	
 4. ☐ Acknowledgment is made of a claim for foreign priority un a) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have 		
2. Certified copies of the priority documents have been received in Application No		
3. Copies of the certified copies of the priority documents have been received in this national stage application from the		
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
5. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give		
6. ☑ CORRECTED DRAWINGS (as "replacement sheets") mus	et be submitted.	
(a) ☐ including changes required by the Notice of Draftspers	on's Patent Drawing Review (PTO	-948) attached
1) hereto or 2) to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date <u>031705</u> .	s Amendment / Comment or in the C	Office action of
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t	.84(c)) should be written on the drawi he header according to 37 CFR 1.121(ngs in the front (not the back) of (d).
7. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT		
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Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5. Notice of Informal F	Patent Application (PTO-152)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ☐ Interview Summary	• • • • • • • • • • • • • • • • • • • •
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/0	Paper No./Mail Da	ite
Paper No./Mail Date 4. Examiner's Comment Regarding Requirement for Deposit	8 🏻 Examiner's Statem	ent of Reasons for Allowance
of Biological Material	9. Other	5.11 5.1 1.00 5.11 5.11 7.11 5.10 1.11 5.
	William &	Tueson
U.S. Patent and Trademark Office	Par 212	Dott of Denot No. (Mail Date 2017)
PTOL-37 (Rev. 1-04)	otice of Allowability TC 210	Part of Paper No./Mail Date 03170

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DETAILED ACTION and ALLOWANCE

1. Claims 1-2, 4-9 have been examined and allowed. Claim 3 has been cancelled.

Priority

2. Acknowledgment is made of applicant's claim priority under 35 U.S.C. 119(e). The provisional application 60/ 140,119 has afforded the non-provisional application, 09/595,550 a priority date of 18 June 1999.

Drawings

3. New corrected and amended formal drawings are required in this application to align the figures with newly presented amendments. Examiner has approved the amendments to the figures and thanks the applicant for their cooperation. The formal drawings are required in reply to the Notice of Allowance to avoid abandonment of the application.

Reasons for Allowance

- The following is an examiner's statement of reasons for allowance:
- 5. The prior art of record does not expressly teach or render obvious the claimed invention as recited in the methodology of claim 1. Specifically the allowable subject matter resides in the limitations, as recited in the context of entirety of the limitation of claim 1, directed to the "process for obtaining raw drilling data and information which collectively represents captured and stored organizational drilling experience" including "drilling knowledge and drilling experience" encompassing "providing an ontology of defined concepts and relationships which relate to and describe drilling operation and

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Application/Control Number: 09/595,550

Art Unit: 2123

organizing said raw drilling data and information into a database in accordance with said ontology and in a data processing format".

Though the prior art of record expressly teaches the use of expert systems, knowledge based systems and case based systems using user and historical data to improve drilling operations, the specific use of the ontology methodology inclusive of the defined concepts and relationships with the raw drilling as taught and supported within the specification was not uncovered and therefore the prior art does not explicitly teach the exacting steps with the ontology as recited in the independent claim 1. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an ipsissimis verbis test, i.e., identity of terminology is not required. In re Bond, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). Though the general concepts using expert, knowledge or case based systems in drilling environment to improve studies are taught and known throughout the prior art the combined operations using the applicant's ontology as recited in the claims and supporting specification within these general teachings the prior art methodologies was not expressly uncovered.

Motivation to combine the teachings of the prior art, including that which would have been known to one with an ordinary level of skill in this art, was not uncovered so

Art Unit: 2123

as to render the claimed invention obvious. Though applicant has stated that the use of LOOM was and is well known the specific methodology of defined concepts and relations relative to applicant's specific teaching were not uncovered, id, nor where they found combination with the knowledge, case or expert systems in the drilling environment for providing the applicant's improvement over the prior art as recited in claim 1, that would have provided a sustainable motivational position to combine such.

Dependent claims 2, 4-9 are allowable as it depends on an allowed independent claims.

Conclusion

- 6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."
- 7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William D. Thomson whose telephone number is 703-305-0022. The examiner can normally be reached on 8:30-3:30 Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska can be reached on 703-305-9704. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 09/595,550

Art Unit: 2123

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

William Thomson Primary Examiner Technology Center 2100

> A.U. 2123 March 17, 2005

March 17, 2005